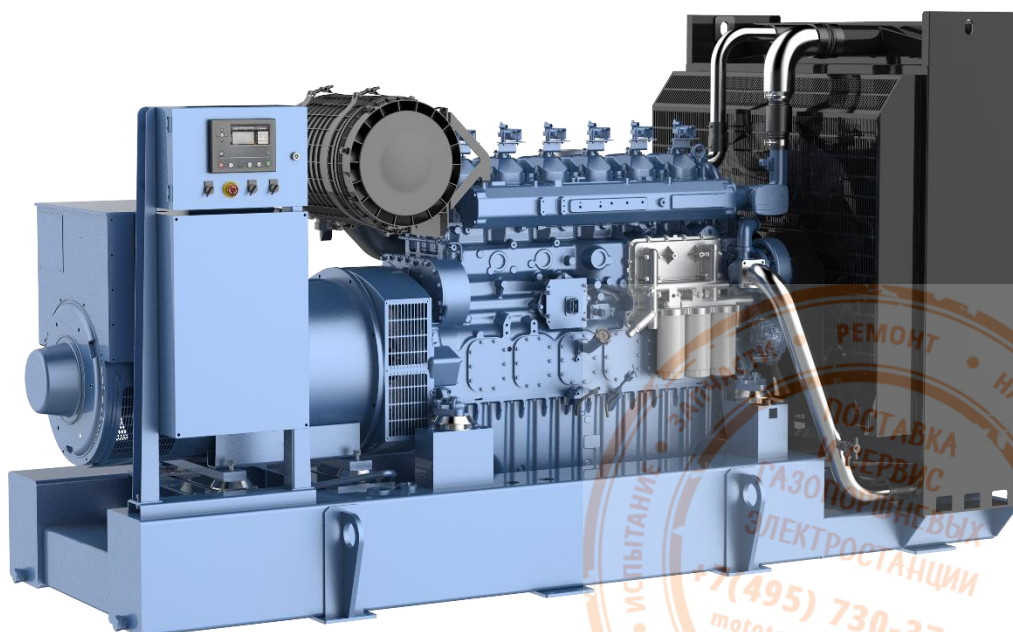


# WEICHAI GEN-SETS DATASHEET



International Land Based Genset- WPG500\*7NG

## Gen-set specifications

Model	WPG500B (L) 7NG
Prime Rating kVA/kWe	500/400
Continual Rating kVA/kWe	400/320
Voltage V	400/230
Frequency Hz	50
Power Factor	0.8(lagging)
No. of Phases	3
Sound@7m (dB(A))	Open: ≤99 dB (A); Silence: ≤85 dB (A)
Ambient temp (°C)	-10~40 (If < -10, oil and water heating; If > 40, power correction)
Altitude(m)	≤2000(If exceed, power correction)
Fuel	Pipeline natural gas: MN≥85
Gas supply pressure(kPa)	Max. inlet 50 (Special pressure, contact with company)
Steady-state voltage deviation	≤±2.5%
Transient voltage deviation (100% sudden power decrease/increase)	+25% ~ -20%
Voltage steady time(s)	2
Steady-state frequency band	≤1.5%
Transient frequency deviation from rated frequency (100% sudden power decrease/increase)	±18%
Frequency steady time(s)	15

## Standard Features

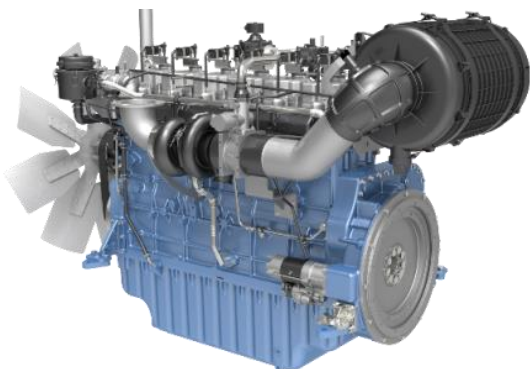
◆ ECU	◆DC24 Electric starter	◆ DSE 7320
◆ Closed water-cooled	◆ IP23	◆H type insulation
◆ Air filter	◆ Muffler	◆ Circuit Breaker
◆Starting batteries (Maintenance-Free)	◆ with connective wires	◆ Radiator
◆Oil Drain Valve	◆Forklift Groove	◆Shock Absorber
◆ Color	Weichai blue (B)/beige canopy and black chassis (L)	
◆ Packaging	Packing case(B)/Wrapping sheet(L)	

## Options

◇ Voltage380V/400V	◇ Voltage 415V/440V	◇ Voltage 6.3kV/10.5kV /13.8kV
◇ Single Voltage 220V/230V/240V	◇ Automatic Transfer Switch	◇ Automatic Parallel system
◇ Engine Heater (water)	◇ Engine Heater (oil)	◇ Alternator heater

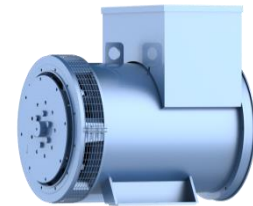
## Engine

- Baudouin **6M33NG** series, 6 cylinder, in-line 4 stroke, radiator cooled engine
- Well-designed air handling system with
  - Replaceable paper element air cleaner with restriction indicator
  - Air to air after cooling
  - Optimized turbocharger for increased altitude capabilities
  - High efficiency, large heat area intercooler, reduce the air temperature after the intercooler
- First fill of lube oil and coolant
- NG gas regulator
- NG gas filter
- Standard integral set-mounted radiator system, designed and tested for 40°C ambient temperature
- Electrical starter motor with soft start engagement feature
- Intelligent fuel injection technology to start fast guarantee
- Battery charging alternator
- 24 V DC batteries



## Alternator

- Brushless type, Screen protected, Revolving field, Self-excited alternator conforming to standard IEC 60034-1
- Best in class efficiency
- Steel casing
- Compact design with sealed bearings for longer life and lesser maintenance
- IP23 standard protection level
- Impregnation on all wound components for better mechanical strength



## Control Module Specifications

### The DSE 7320 is an Auto Mains Failure Control Module

- Back-lit LCD display
- 3 Phase generator and 3 Phase Mains monitoring
- Monitoring speed, frequency, voltage, current, oil pressure, coolant temperature
- Display warning, shutdown and engine status information
- Hours counter provides accurate information for monitoring and maintenance



## Engine specifications

Make	Baudouin		
Mode	6M33G6N0/5		
Rated Speed r/min	1500		
Prime Power kW	450		
Cooling	Close Liquid cooled		
Governor	ECU		
Aspiration	Turbocharged, Inter-cooled		
No. of cylinders	6, in-line		
Bore (mm) x Stroke (mm)	150x185		
Displacement (L)	19.6		
Starting system	24VDC Electrical		
Total coolant capacity engine/tank (L)	44/115		
Radiator design temperature (°C)	40		
Lubrication system capacity (L)	62		
Load rate (%)	100	75	50
Fuel consumption (kg/h)	84.6	63.7	45.3
Fuel consumption (MJ/h)	4052,34	3051,23	2170
Fuel consumption (m <sup>3</sup> /h) 8000 Kcal	121	91	65
Engine high water heat quantity(kJ/s)	184.2	129.1	107.8
Engine high water flow(m <sup>3</sup> /h)	34.5	33.2	32.6
Engine high water inlet/outlet Tem. (°C)	90.0 /95.5	89.4/93.4	88.4/91.8
Engine high water inlet/outlet Pre. (kPa)	0.4/36.9	0.5/28.1	0.6/21.1
Exhaust gas heat quantity(kJ/s)	363.2	274.7	184.2
Exhaust gas flow (kg/h)	2064. 6	1543.7	1048.3
Exhaust Temperature (°C)	565	572	586
Exhaust back pressure (mbar)		75	
Exhaust Temperature after recycle(°C)	Heating water120/0.5Mpa steam 190/1MPa steam 220		

## Alternator specifications

Make	LEROY-SOMER
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Alternator Frame	TAL-A47-C
Exciter Type	Self-excitation
Enclosure	IP23
Voltage regulation	$\leq \pm 1\%$
Class of Insulation	H
Winding Pitch	2/3
Rotor	Single bearing

## Remarks

### Prime Rating (PRP) :

Prime power is defined as being the maximum power which a generating set is capable of delivering continuously while supplying a available electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed.

### Continual Rating (COP):

These ratings are applicable for supplying continuous electrical power (at 100% load) in the event of a utility power failure. There is no limitation to the annual hours of operation under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed.

## Standard Reference Conditions

Standard operating environment: ambient temperature is  $-10^{\circ}\text{C}$ ~ $40^{\circ}\text{C}$ , the altitude is less than 1000m, the relative humidity is less than 90%( $25^{\circ}\text{C}$ ) and there is no dust\stand dust\salt fog\mold\condensation environment, etc.

Fuel consumption data at full load with diesel fuel with specific gravity of  $0.726 \text{ kg/N m}^3$  and low calorific value of  $47.9 \text{ MJ/kg}$ .

If the operating environment exceeds the above requirements, please contact with the factory.

## Typical Genset Dimensions

Genset Model	Length A(mm)	Width B(mm)	Height C(mm)	Wet Weight (kg)	Note
WPG500B7NG	3600	1680	2120	4700	
WPG500L7NG	5500	2100	2320	8200	

Note: This size cannot be used for design, for design, please contact with company.

Open genset

Silence genset

